## **Listing of Claims**

## 1.-6. (Canceled).

- 7. (Currently Amended) A method of determining whether a <u>human</u> subject is at risk for development of macular degeneration, the method comprising the steps of: (a) obtaining a nucleic acid sample from the <u>human</u> subject; and (b) conducting an assay on the nucleic acid sample to determine the presence or absence of a mutation of a polynucleotide sequence set forth as SEQ ID NO: 1, the mutation being a substitution of at least one base of the codon at position 16,262, 16,263 and 16,264 wherein the codon encodes arginine a FIBL 6 gene mutation associated with macular degeneration, wherein the presence of a FIBL 6 gene point; and (c) correlating the presence of the mutation associated with macular degeneration indicates with the presence of macular degeneration, wherein the presence of the mutation determines that the human subject is at risk for development of macular degeneration.
- 8. (Original) The method of claim 7, wherein the assay is selected from the group consisting of probe hybridization, direct sequencing, restriction enzyme fragmentation and fragment electrophoretic mobility.
- 9. (Original) The method of claim 7 wherein the nucleic acid sample is an RNA sample and the assay is a direct sequencing assay.
- of: (a) reverse transcribing the RNA sample to produce a corresponding cDNA; (b) performing at least one polymerase chain reaction with suitable oligonucleotide primers to amplify the polynucleotide sequence set forth as SEQ ID NO: 1 the FIBL 6 cDNA; (c) obtaining the nucleotide sequence of the amplified polynucleotide FIBL 6 cDNA; and (d) determining the presence or absence of the substitution of at least one base of the codon at position 16,262, 16,263 and 16,264 of the polynucleotide sequence set forth as SEQ ID NO: 1 wherein the codon encodes arginine a FIBL 6 gene point mutation.

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- 11. (Canceled).
- 12. (Canceled).
- 13. (Original) The method of claim 7 wherein the nucleic acid sample is a DNA sample.
- 14. (Currently Amended) The method of claim 9 wherein the DNA sample is a genomic DNA sample and the assay comprises the steps of: (a) amplifying a target portion of the nucleotide sequence of the genomic DNA; (b) obtaining the nucleotide sequence of said amplified portion; (c) determining the presence or absence of a FIBL-6 gene mutation associated with macular degeneration the substitution of at least one base of the codon at position 16,262, 16,263 and 16,264 wherein the codon encodes arginine in said target portion nucleotide sequence.
  - 15. (Canceled).
- symptoms is suffering from familial AMD, confirming a diagnosis of acute macular degeneration in a human subject, the method comprising the steps of: (a) obtaining a nucleic acid sample from the human subject; and (b) conducting an assay on the nucleic acid sample to determine the presence or absence of a polynucleotide encoding a polypeptide sequence set forth as SEQ ID NO: 2, wherein arginine at position 5345 is substituted by a glutamine a FIBL 6 point mutation associated with AMD, wherein; and (c) correlating the presence of a polynucleotide encoding a polypeptide sequence set forth as SEQ ID NO: 2, wherein arginine at position 5345 is substituted for a glutamine with the presence of acute macular degeneration, thereby confirming the diagnosis of acute macular degeneration in the human subject a FIBL 6 point mutation associated with AMD indicates that the subject is suffering from AMD.
  - 17. (Canceled)

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- 18. (Currently Amended) The method of claim 17 16, wherein the nucleic acid sample is an RNA sample and the assay is a direct sequencing assay.
- 19. (Currently Amended) The method of claim 17 16, wherein the nucleic acid sample is a DNA sample.
- 20. (Currently Amended) The method of claim 17 16, wherein the nucleic acid sample is a genomic DNA sample and the assay comprises the steps of: (a) amplifying a target portion of the nucleotide sequence of the genomic DNA; (b) obtaining the nucleotide sequence of said amplified target portion; and (c) determining the presence or absence of a polynucleotide encoding a polypeptide sequence set forth as SEQ ID NO: 2, wherein arginine at position 5345 is substituted for a glutamine is correlated with the presence of acute macular degeneration of a FIBL 6 gene point mutation associated with AMD in said target portion nucleotide sequence.
  - 21. (New) The method of claim 7, wherein the sample comprises a blood sample.
  - 22. (New) The method of claim 16, wherein the sample comprises a blood sample.
- 23. (New) The method of claim 16, wherein the diagnosis comprises analysis of stereoscopic photographs of the macula.

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